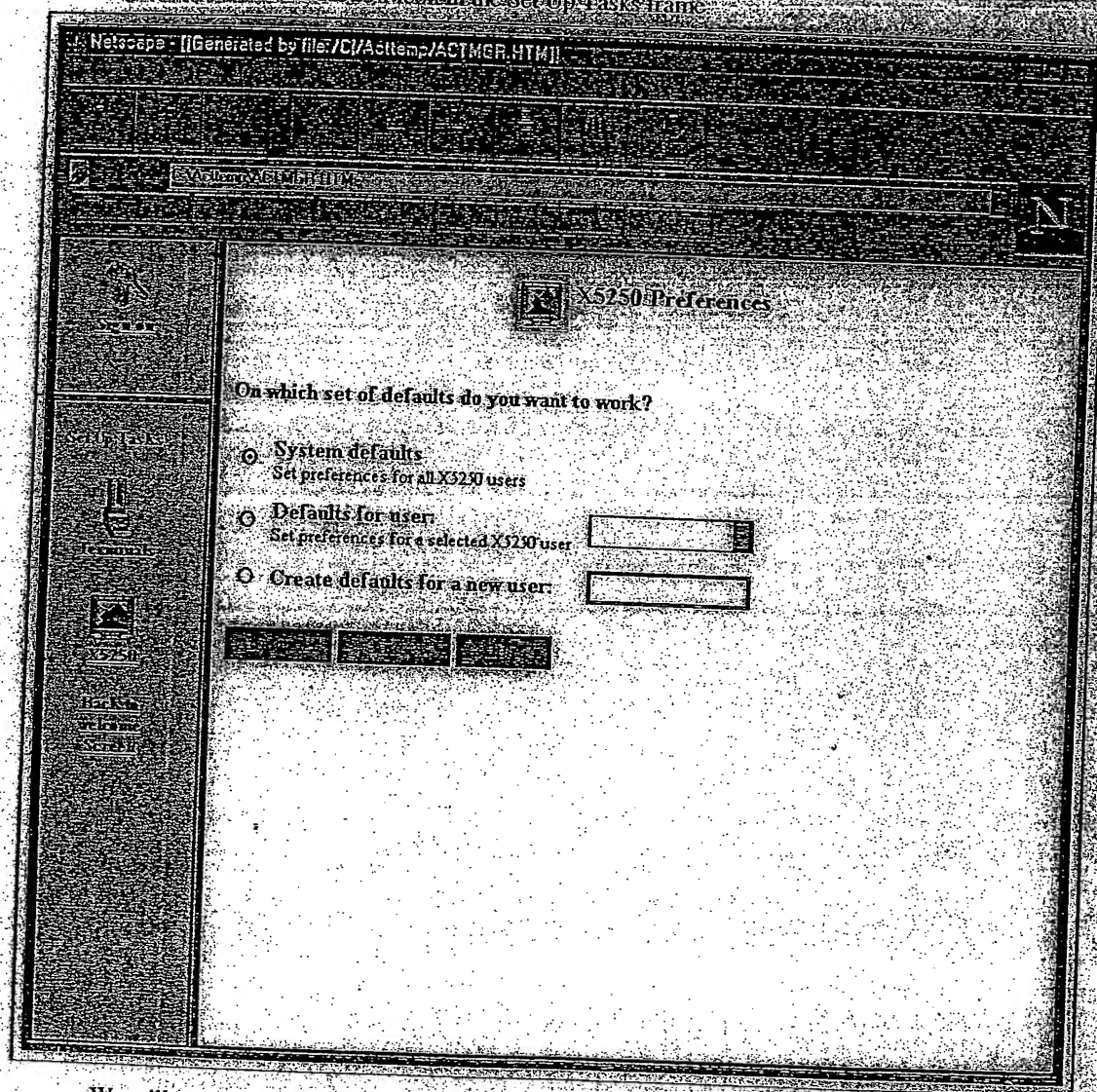### 4.6.1.5 User Interface

The ACT Manager's user interface (UI) will consist of HTML (HyperText Markup Language) pages which will be viewed through the ACT's Web browser or workstation web browser. The main browser page will consist of at least two frames, one of which will be a menu to allow the administrator to select a set of preferences to view or work on. The main frame will be a work area and will include an HTML form; this will contain the UI controls which will show the current preference settings and allow the administrator to make changes. An example appears below to illustrate how this could look; in the example, the user has just clicked on the X5250 icon in the Set Up Tasks frame.

Netscape - [[Generated by file:/C//Acttemp/ACTMGR.HTM]]

X5250 Preferences

On which set of defaults do you want to work?

◉ System defaults
   Set preferences for all X5250 users

○ Defaults for user:
   Set preferences for a selected X5250 user

○ Create defaults for a new user:

We will use JavaScript functions to enhance the behavior of the forms in the UI. JavaScript will allow us to write event handling functions to perform routine data validation on the form prior to submitting it to a CGI (Common Gateway Interface) program running on the server—a performance and usability enhancement.

10/14/2004 2:25:27 PM

Specific online help will be provided for each form; a separate help window will open when the user requests help by pushing the help button on the form.

4.6.1.5 ACT Utilities Interface

The ACT Utilities component is new for the ACT. The ACT Manager will send messages to ACT Utilities as part of the preference update process. The ACT Utilities will be listening on a well known port that is listed in etc/services on the AS/400. A socket will be used to communicate with ACT Utilities. Changes for a particular user or terminal preference may be made by an administrator located on his own terminal. The ACT Manager needs to locate the terminal where the new preference should be applied. The ACT Manager will use the following methods to locate the target ACT terminal.

- The ACT Manager needs to lookup the terminal IP address given a terminal host name. When a new terminal boots the bootp daemon will update etc/hosts. The ACT Manager will then use gethostbyname() to lookup the terminal. The ACT Manager also needs to know which devices are ACT terminals. The load_type field in the bootptab file will be read to filter out non-ACT devices.

- The ACT Manager needs to lookup the terminal IP address given the name of a user. This will tell the ACT Manager on which terminal a user is logged on. When a user logs onto the terminal the Logon program will write his IP address and hostname to a file in the user's directory. The ACT Manager will read this file and attempt to contact the device(s) listed. The Logon program will add and remove entries to these files as users logon and logoff. (Note: we may use the security object, not a file...TBD).

A messaging interface needs to be defined between the ACT Manager and ACT Utilities. Shown below is the current list of messages sent to ACT Utilities.

Tell ACT Utilities to reboot the terminal. ACT Utilities waits num_sec, displays the reboot message and then reboots the terminal.

Field Name	Field Value
Command ID	REBOOT
Configd Password	String act_mgr_configd_pw
Reboot Type	RESET_TERM
Reboot Timing	int num_sec /* 0 reboot now */ /* >0 reboot after time delay */ /* -1 reboot at next logoff */
Reboot Message	String message_text

Tell ACT Utilities that a user preference file has changed for a particular application. The ACT Utilities uses the target UserID to verify the user is still logged on. The ACT Utilities uses the client app name to locate the X Server files to xrdb_load. The ACT Utilities will reload the X Server files in the normal order (ie. control, then system, then user).

Field Name	Field Value
Command ID	USER_PREF_AVAILABLE
Configd Password	String act_mgr_configd_pw
Target User ID	String user_id /* NULL == current user */
Client App	String client_app_name
Application Timing	int num_sec /* 0 apply changes now */ /* >0 apply after delay */

	/* -1 apply at next logoff */

Tell ACT Utilities to display a Pop-up informational message sent by an administrator:

Field Name	Field Value
Command ID	DISPLAY_MESSAGE
Configd Password	String act_mgr_configd_pw
Target User ID	String user_id /* NULL == current user */
Message	String message_text

Query ACT Utilities for the current logged-on UserID and password. This is used by the ACT Manager CGI to learn which user is talking to it through the browser.

Field Name	Field Value
Command ID	GET_CURRENT_USER
Configd Password	String act_mgr_configd_pw

Reply from ACT Utilities containing current UserID:

Field Name	Field Value
Command ID	REPLY_CURRENT_USER
UserID	String user_id
Password	String password

10/14/2004 2:25:27 PM

Page 3 of 3

IBM

HELP PANEL FOR WEB PRODUCTS

Exhibit B

Title of Invention *(Short & Descriptive)*			
HELP PANEL FOR WEB PRODUCTS			

Disclosure No.	Functional Manager	Receiving Date	Receiving Time
RO896-0263	Steven W. Roth	12/08/96	18:35:50

Patent Attorney	Evaluator	Evaluation Area
Steven W. Roth *Owen Gamon*	Steven W. Roth *Owen Gamon*	▓

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
O'Keefe, Timothy J	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
Brandt, Marcy L	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
DiCecco, Joseph V	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
Hansen, Jason R	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
Moskalik, Thomas M	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
Olson, Diane E	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Inventor	Emp Serial	Div/Dept	Bldg or Zip	Location	Tel Number
Snyder, Devon D	▓	▓	▓	▓	▓
Area Code	**Electronic Address**	**Manager's Name**		**Manager's Electronic Address**	
▓	▓	▓		▓	

Table 1. Critical Dates Information	
Date invention workable:	08/16/96
Used or Planned for product:	Y
If so, Product Name?	Network Station
Release?	V3R2 & V3R7
Announce Date?	10/29/96
Public Demonstration or Use:	Y N
If so, When?	09/00/96
Where?	Multiple Instances
Disclosed to Non-IBMers:	Y N
If so, When?	09/00/96
Where?	Multiple Instances
CDA in place?	N
Use in Manufacturing:	N
If so, When?	
Where?	
Product Name?	

Per conversation
with Jim Okak
and Gky t-lka
12/20/96
JSG

Problem

Help has always been a vital part of any computer program; it provides more in depth information about controls and options than can be shown on the panel the user is working with. In many operating systems (e.g. OS/2, Windows 3.1 and 95) help is displayed in a separate window. This allows the user to keep working in the main window, yet refer to the help window when needed.

In web applications, generally, the user asks for help by clicking on a hypertext link of a topic of interest and the main work area is replaced by the help information. The browsers' back button (or a similar navigation mechanism) is used to return to the area of interest. This requires the user to remember the relevant help information from one panel to the next. This is awkward and makes the user pay a heavy penalty in terms of performance (both human and machine) whenever they need help.

Solution

Our solution to the problem uses JavaScript to spinoff a new small browser window (ours is about 450 X 400 pels) when the user clicks a help button. The new window consists of three frames - a contents frame (A), a help information frame (B), and a navigation frame (C).
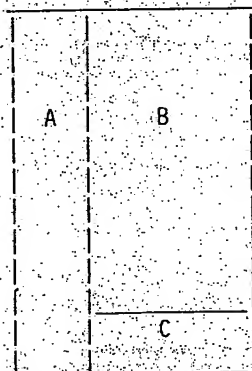
The contents frame (A) contains a table of contents for the help. The actual help text is displayed in frame B, and frame C contains three pushbuttons - Back, Forward and Close.

When a user clicks the help button, the new browser help window is opened. JavaScript is used to determine the panel the user is on and which HTML file (containing help information) to display in Frame B. So, for instance, if the user is on web page X, and the help button is pressed, the help window is opened with information specific to web page X in Frame B.

Frame A displays a table of contents with hypertext links to the various HTML files and topics for the product. The table of contents provides a mechanism for the user to keep the help window up while working in a web product, and get help information for any panel.

This solution enables help to be viewed without interfering with the users interaction with the web page and reduces the mental workload and frustration for a user. It provides contextually relevant help while allowing the user to find any other help needed.

An early version of our product, with this function, can be found at:
HTTP://rchas317.rchland.ibm.com/QIBM/NetworkStation/MRI2924/nsmgr.htm

Evaluation Questions

If this problem has been solved before, how was it solved?

HELP PANEL FOR WEB PRODUCTS

Why is your solution better?

Who outside of IBM (competitors) would want to use your solution?

How could IBM discover that competitors were using your solution?

Exhibit C

From: DIANE   --RCHvMV2   Date and time   12/24/96 07:06:10
To: PROPLAW --RCHVMP

*** Resending note of 12/23/96 11:39
From: Diane Olson   RCHVMV2(DIANE)   T/L 553-0212
FQK/015-2 Rochester, MN
Subject: Disclosure RO896-0263 Results
To Inventors: O'Keefe, Timothy J
               Brandt, Marcy L
               DiCecco, Joseph V
               Hansen, Jason R
               Moskalik, Thomas M
               Olson, Diane E
               Snyder, Devon D

IBM CONFIDENTIAL

23 Dec 1996
OWEN J. GAMON

Invention Disclosure RO896-0263, now Application RO996-172

Title: HELP PANEL FOR WEB PRODUCTS

IMMEDIATE ACTION REQUIRED (RECORD OF INVENTION FORM BELOW).

Your disclosure has been reviewed by technical management and
Intellectual Property Law to determine the most appropriate form of
legal protection for your concept. I am pleased to inform you that a
patent application will be filed.

I appreciate your time and effort in submitting this disclosure, and
the creative thought which stands behind it. Either myself or an
outside attorney will be preparing the patent application and will
contact you for additional information at a future date.

After the patent application has been prepared, I will be checking
with you to make sure that all inventors have been properly
identified. This identification process cannot be done conclusively
until all of the claims have been written. To be a named inventor,
you must have contributed to the conception of at least one claim of
the patent application.

Note that your invention may be rerated to "publish" or "close" if
IBM's business needs change.

Please complete the Record of Invention form below. To do this,
please use the RESEND function, answer all questions, and send it to
PROPLAW at RCHVMP. This form is a necessary part of our file
documentation. Your assistance in keeping our file accurate is
appreciated.

RECORD OF INVENTION

Date you first conceived the invention:
August 1996

Date when invention was workable (Prototype or model has been built
or coded, and you know it will work but all the "bugs" aren't out.):
August 1996

Describe all documents, hardware, models, programs, witnesses and
tests showing both of the above.
ACT Manager SAI document, first review draft 08/16/96 (although
the actual HTML frames were demonstrated via the prototype, and
not shown in the document)
The prototype was demonstrated at the review of this document.
Witnesses included the reviewers present, Devon Snyder has a list.

ACT Manager IO design document, first review draft 09/20/96.

COMMENTS:

_____

If you have any questions, please feel free to contact me.

OWEN J. GAMON

cc: OWEN J. GAMON
cc: First Line Managers for Inventors
cc: Awards Administrator

International Business Machines Corporation

3605 Highway 52 North
Rochester, MN 55901-7829

December 23, 1996

Terry A. Meador
Baker, Jester, Maxham and Meador
Symphony Towers
750 B. Street, Suite 2770
San Diego, CA 92101

Subject: IBM Docket No. RO996-172
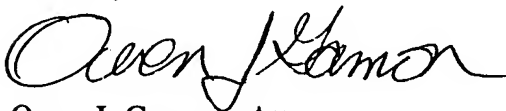   "HELP PANEL FOR WEB PRODUCTS"

Dear Terry:

Per our telephone conversation I am sending you a copy of the invention disclosure (RO896-0263) for the above docket. It is very important that the patent application be completed by the **BARDATE of February 3, 1997**.

Please limit fees for professional services to $7000.00.

Call me with comments or questions that you may have.

Thank you for your assistance in the preparation of this patent application.

Sincerely,

Owen J. Gamon, Attorney
Intellectual Property Law
Department 917, Building 006-1
(507) 253-4660

OJG/car
Enclosures

IBM CONFIDENTIAL

PREPARED BY IBM ATTORNEY   PRIVILEGE REVIEW REQUIRED

DATE: 12/30/96

SEARCH REQUEST FORM

Disclosure Number: RO896-0263

Title: HELP PANEL FOR WEB PRODUCTS

Attorney requesting search: O.J. Gamon
Attorney's Node(Userid):   RCHVMP(GAMON)
Location: Rochester

Type of search requested:
  Patentability   Clearance   Validity   State of Art
       —   X   —   —

Can this search be assigned to an ABC Searcher? . . YES

Date results are needed, if rush request. 1/15/97

Background references requested?. . . . . NO

Significant prior art to help the searcher:

Similar or related disclosures:

Database name and keywords used, if any:

Subclasses and/or databases wanted searched:
  WPAT, JAPIO, APS

Feature(s) to be searched: (If there are any aspects of the
Invention as disclosed that you do NOT want searched, please
specify):
███
███
███
███
███
Sample search terms:
███
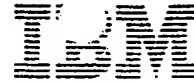
International Business Machines Corporation   3605 Highway 52 North
                                                   Rochester, MN 55901-7829

January 17, 1997

Terry A. Meador
Baker, Jester, Maxham and Meador
Symphony Towers
750 B. Street, Suite 2770
San Diego, CA 92101

Subject: IBM Docket No. RO996-172
                "HELP PANEL FOR WEB PRODUCTS"

Dear Terry:

        Enclosed, please find a copy of the search results to assist you in the preparation
of the subject patent application.

        Please call me with comments or questions that you may have.

        Thank you for your assistance in the preparation of this patent application.

                                Sincerely,

                                Owen J. Gamon /skb

                                Owen J. Gamon, Attorney
                                Intellectual Property Law
                                Department 917, Building 006-1
                                (507) 253-4660

OJG/skb

Enclosures

BAKER, MAXHAM, JESTER & MEADOR

A PROFESSIONAL LAW CORPORATION

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LAWRENCE A. MAXHAM
MICHAEL H. JESTER
TERRANCE A. MEADOR
DAVID A. HALL

OF COUNSEL
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FACSIMILE (619) 544-1246
URL http://www.bmjm.com

DAN L. HUBERT
BRUCE W. GREENHAUS
KENT D. BAKER

PATENTS
TRADEMARKS
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January 22, 1997

Owen J. Gamon, Esq.
IBM Corporation
IP Law Department 917
3605 Highway 52 North
Rochester, Minnesota 55801

VIA FACSIMILE

Re: U.S. Patent Application for
**METHOD AND APPARATUS FOR DISPLAYING HELP WINDOW
SIMULTANEOUSLY WITH WEB PAGE PERTAINING THERETO**
Inventors: M.L. Brandt et al.
IBM Docket No.: R09-96-172
Our Reference No.: 1341-44

Dear Owen:
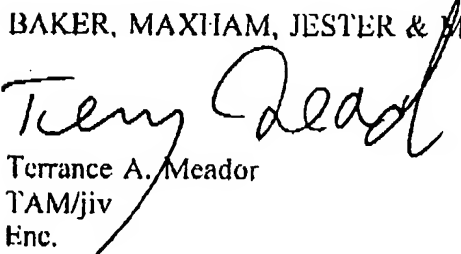
Enclosed is the subject draft application of your consideration.

By copy of this letter, the inventors are requested to read and revise the draft application,
consolidate their comments into a single copy of the application, and return them
promptly to me. Recall that the application must be filed on or before **February 3, 1997.**

Please contact me with any questions.

Very truly yours,

BAKER, MAXHAM, JESTER & MEADOR

Terrance A. Meador
TAM/jiv
Enc.

cc   J. DiCecco, Inventor

P:\WP60\USERS\JENNIFER\IBM\1341\1341-44.L01

BAKER, MAXHAM, JESTER & MEADOR

A PROFESSIONAL LAW CORPORATION

FRELING E. BAKER
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MICHAEL H. JESTER
TERRANCE A. MEADOR
DAVID A. HALL

———

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URL http://www.bmjm.com

DAN L. HUBERT
BRUCE W. GREENHAUS
KENT D. BAKER

———

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January 30, 1997

Owen J. Gamon, Esq.
IBM Corporation
IP Law Department 917
3605 Highway 52 North
Rochester, Minnesota 55801

VIA FACSIMILE

Re: U.S. Patent Application for
**METHOD AND APPARATUS FOR DISPLAYING HELP WINDOW
SIMULTANEOUSLY WITH WEB PAGE PERTAINING THERETO**
Inventors: M.L. Brandt et al.
IBM Docket No.:   R09-96-172
Our Reference No.:   1341-45

Dear Owen:

A revised draft application for above-identified case is enclosed for your review of
inventorship. All requested changes have been incorporated.

We would like to file this application today, Friday, January 31, 1997.

Please call me with any questions.

Very truly yours,

BAKER, MAXHAM, JESTER & MEADOR

Terrance A. Meador

TAM/jr
Enc.

F:\WPGO\USLRS\JENNIFER\IBM\1341\1341 45.LO1

Exhibit I

IBM

Office of Counsel, Intellectual Property Law
3605 Hwy. 52 North, 917/006-1
Rochester, Minnesota 55901
Phone 507-253-5331   Fax 507-253-2382
     tie 553-5331   tie 553-2382

Facsimile Transmission

_2 17 , 1997_

_3_ Pages to follow

___ Please confirm receipt

NOTICE

_✓_ **IBM CONFIDENTIAL**   ___ **IBM INTERNAL USE ONLY**
_✓_ **PREPARED BY IBM ATTORNEY** ___ **PERSONAL**
_✓_ **PRIVILEGE REVIEW REQUIRED** ___ **UNCLASSIFIED**

From Owen J. Gamon   To   _Terrance Meador (619) 233-9004 (phone)_
                              (619) 544-1246 (fax)

Fax   507-253-2382

Voice 507-253-4660

Subject: _1341-44_

Our Ref.: _RO996-B_

After making attached changes and incorporating inventor comments, please send execution copy & formal papers.

Owen J Gamon

Exhibit J
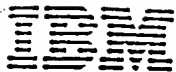
Office of Counsel, Intellectual Property Law
3605 Hwy. 52 North, 917/006-1
Rochester, Minnesota 55901
Phone 507-253-5331   Fax   507-253-2382
    tie 553-5331   tie 553-2382

Facsimile Transmission

2-24, 1997

_4_ Pages to follow
___ Please confirm receipt

NOTICE

This communication is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are neither the intended recipient, nor the employee or agent responsible for delivering the communication to the intended recipient you are hereby notified that any disclosure, dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original communication to us at the address above via the U.S. Postal Service. Thank you.

___ IBM CONFIDENTIAL
___ PREPARED BY IBM ATTORNEY
___ PRIVILEGE REVIEW REQUIRED

___ IBM INTERNAL USE ONLY
___ PERSONAL
___ UNCLASSIFIED

From   Owen J. Gamon   To   _Terry Meador_
                              9-1-619-544-1246

Fax   507-253-2382

Voice 507-253-4660

Subject: _1341-44 . More comments from Timothy O'Keefe_
Our Ref.: _RO996-172_

Please incorporate into the execution copy

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application Transmittal

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith for filing is the Patent Application of:

Inventor: M L Brandt et al

For: METHOD AND APPARATUS FOR DISPLAYING HELP WINDOW SIMULTANEOUSLY WITH WEB PAGE PERTAINING THERETO

Enclosed are:

[X] _3_ sheets of drawings
[X] A Declaration and Power of Attorney
[ ] An Information Disclosure Statement and form PTO-1449
[ ] A certified copy of a ____ application
[X] An assignment of the invention to International Busines Machines Corporation, Armonk, New York 10504
[ ]

The filing fee has been calculated as follows:

Other Than Small Entity

For:	No. Filed	No. Extra	Rate	Fee
Basic Fee				$ 770.00
Total Claims	25 -20 =	5	x $22.00=	$110.00
Indep. Claims	6 -3 =	3	x $80.00=	$240.00
[ ] Multiple Dependent Claim Presented			$260.00	$ 0.00
			TOTAL	$1120.00

EXPRESS MAIL CERTIFICATE

Express Mail Label No.: HB215557749 US
Date: February 25, 1997

I hereby certify that I am depositing the enclosed or attached paper with the U.S. Postal Service "Express Mail Post Office to Addressee" service on the above date, addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

⊗ _Owen J. Gamon_
Owen J. Gamon

Patent Application Transmittal
Attorney Docket No. RO996-172